1.0 PURPOSE AND SCOPE

This guidance document provides guidance to implement the respirator issuance and control processes outlined in TFC-ESHQ-S_IH-C-05. These instructions cover the responsibilities for both respirator issuers and users.

2.0 IMPLEMENTATION

This guidance document is effective on the date shown in the header.

3.0 RESPONSIBILITIES

Responsibilities are contained within Section 4.0.

4.0 GUIDANCE

4.1 Mask Issuers Core Team

This team will be made up of representatives from each organization that issues respirators and the CH2M HILL Safety & Health respiratory program administrator. The team will meet at least quarterly, or more often, as needed. The team will review the program, address issues, and be proactive members to correct any deficiencies and make improvements. Operations managers will support this effort.

Operations managers will ensure that any employee tasked with issuing masks is familiar with the requirements of this guidance document prior to making the work assignment (e.g., Attachment A briefing sheet).

4.2 General Guidance for Issuing Respirators

4.2.1 Respirator Issuers

1. Respirator issuers must ensure that the respirator issued to a user is the exact make, model, and size specified on the user's mask fit card.

2. Respirator issuers shall ensure that both the user's mask fit and respiratory protection training are current by checking the expiration date on the back and front of the mask fit card.

3. Respirator issuers shall confirm that the physical appearance of the user matches their mask fit card (e.g., users are clean shaven).

4. Respirator issuers are responsible to fill out all items on the log sheet except the signature by the user confirming that they received the correct respirator and cartridges.

   NOTE: Respirator issuers shall print the user's name on the log sheet.

4.2.2 Respirator Users

1. Users must ensure that the respirator issued to them is the exact make, model, and size specified on their mask fit card.

2. Respirator users shall ensure that they are able to wear a respirator by assuring that their mask fit and respiratory protection training are current by checking the expiration date on the front and back of their mask fit card.

4.3 Guidance for Issuing Mine Safety Appliance (MSA) UltraTwin Full Face Respirators

MSA UltraTwin face pieces are available in three sizes (S, M, L), made from two materials (hycar, silicon), for a total of six models. Respirator users are typically fit for one model of MSA UltraTwin, one size, and one material. MSA respirator users are also fit for one size face piece. MSA respirator users are typically fit-tested for the hycar respirator, unless silicon is specified on their mask fit card. The respirator manufacturer has stated that the silicon respirator provides as good or better fit than the hycar respirator.

4.3.1 Respirator Issuers

1. Silicon MSA UltraTwin respirators may be issued to respirator users fit for the hycar respirator.

2. Respirator users fit-tested specifically for the silicon respirator must be issued that respirator and SHALL NOT be issued the hycar respirator.

   NOTE: Silicon MSA UltraTwin face pieces are labeled “silicon” on the top front above the face piece window.

4.3.2 Respirator Users

Users must ensure that they are not issued a hycar respirator if they are specifically fit-tested for the silicon respirator.

4.4 Guidance for Issuing Scott O-Vista® and AV-2000 Full Face Respirators

Three models of Scott face pieces are used at CH2M HILL: the Scott O-Vista; AV-2000; and AV-2000 Comfo-Fit. Two Scott face piece models come in three sizes (S, L, XL). The AV-2000 Comfo-Fit face piece comes in a “one size fits all” model. Scott face pieces are also available in several strap/harness configurations. The various models/configurations can be recognized as follows.

- The Scott O-Vista can be recognized because it has no nose cup or communication diaphragms.

- The Scott AV-2000 and AV-2000 Comfo-Fit can be recognized because they have a nose cup and/or communication diaphragm. The nose cup cannot be removed from the AV-2000 face piece.

- Comfo-Fit face pieces are different from regular AV-2000 face pieces in that they have no size specified. The color is black.

  NOTE: It is difficult to tell the difference except for the larger chin cup.

- Scott mask with poly harness – Black.

- Scott mask with kevlar harness – Yellow.

The model, size, and strap/harness configuration all affect the fit of Scott face pieces. Each user is fit for the model, size, and strap/harness configuration that provides the best fit and applicability to their work.

4.4.1 Respirator Issuers

Prior to issuing the Scott respirator, confirm that the face piece, model, size, and strap/harness configuration for which a user is fit are specified on their mask fit card.

4.4.2 Respirator Users

Confirm that the Scott face piece, model, size, and strap/harness configuration that are issued are as specified on their mask fit card.

4.5 Guidance for Issuing 3M Breathe Easy Powered Air Purifying Respirators

The 3M Breathe Easy Powered Air Purifying Respirator (PAPR) unit is composed of a motor blower unit, three respirator cartridges, a butyl rubber breathing tube, and a Tyvek1 QC hood. The breathing tube connects to the motor blower unit with a hose clamp and to the hood with a snap-in connector. The 3M Breathe Easy PAPR is used with the FR-57 cartridge, a combination cartridge that provides protection from particulates, including radionuclides, volatile organic compounds and ammonia. A high-efficiency particulate air (HEPA)-only cartridge is available. Complete PAPR units are provided by CH2M HILL Respiratory Protection to respirator issue stations for issuance. Breathe Easy (BE)-10 PAPR hoods have a protective paper layer over the face piece lens. Cartridges will be supplied sealed individually in foil packaging or attached to the PAPR with end caps in place. PAPR units will be issued from, and returned to, current respirator issue stations. Used respirator units will be returned to CH2M HILL Respiratory Protection when maintenance or testing is required. Industrial Hygiene will pick-up and deliver the PAPR units, as needed, from the respirator issue station.

4.6 General Guidance for Respirator Use

Respirators shall be used for a maximum duration of one shift. Radiological release procedures apply to respirators used strictly for protection in air monitoring zones. New respirator cartridges must be obtained when cartridges cannot be radiologically released. New respirators may have to be obtained if radiological release cannot be obtained, especially on back shifts.

1 Registered trademark of E.I. du Pont de Nemours and Company

4.7 Control of Respirators

Respirators (includes Air Purifying Respirator (APR)/PAPR masks and hoods, PAPR blowers, respirator cartridges, and canisters) shall be properly controlled from the time they are issued until the time they are returned to the issue station. Respirator users are responsible for proper control of respirators issued to them. When not in use, respirator users shall control respirators issued to them.

4.7.1 Respirator Users

1. Users shall keep respirators in their possession.

2. Respirators not in use should be in the physical possession of the user. This includes being carried by the user or sitting in plain sight of the user (e.g., on the seat of a vehicle next to them).

3. Users shall store their respirators in a secure location:

   - Outside areas where respiratory protection is required
   - Outside of radiological buffer areas
   - In a place where the respirator is protected from tampering, physical damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals.

4. Respirator users shall be responsible to note in the log book, or other means, if the respirator units cannot be returned by the end of the shift.

5.0 DEFINITIONS

No terms or phrases unique to this guidance document are used.

6.0 RECORDS

No records are generated during the performance of this guidance document:

7.0 REFERENCES

1. TFC-ESHQ-S_IH-C-05, “Respiratory Protection.

ATTACHMENT A – RESPIRATOR USER AND ISSUER BRIEFING

Respirator Issuers

Respirators were issued to respirator users who did not have fit tests for the specific respirator issued. Issuers must ensure that the respirator issued to a user is the exact make, model, and size specified on the user's mask fit card. Respirator issuers shall also ensure that both mask fit and respiratory protection training are current by checking the expiration date on the back and front of the mask fit card.

Respirator Users

Respirators were issued to respirator users who did not have fit tests for the specific respirator issued. Users must ensure that the respirator issued to them is the exact make, model, and size specified on their mask fit card. Respirator users shall ensure that they are able to wear a respirator by ensuring that their mask fit and respiratory protection training are current by checking the expiration date on the back and front of the mask fit card.

MSA UltraTwin Full Face Respirators

MSA UltraTwin face pieces are available in three sizes (S, M, L) made from two materials (hycar, silicon), for a total of six models. Respirator users are typically fit for one model of MSA UltraTwin, one size, and one material. MSA respirator users are fit for one size face piece. MSA respirator users are fit tested for the hycar respirator, unless silicon is specified on their mask fit card. The respirator manufacturer has stated that the silicon respirator provides as good or better fit than the hycar respirator. Silicon MSA UltraTwin respirators may be issued to respirator users fit for the hycar respirator. Respirator users fit tested specifically for the silicon respirator must be issued that respirator and shall not be issued the hycar respirator. Silicon MSA UltraTwin face pieces are labeled "silicon" on the top front above the face piece window.

Scott O-Vista and AV-2000 Full Face Respirator

Three models of Scott face pieces are used at CH2M HILL: the Scott O-Vista; AV-2000; and AV-2000 Comfo-Fit. Two Scott face piece models come in three sizes (S, L, XL). The AV-2000 Comfo-Fit face piece comes in a "one size fits all" model. The Scott O-Vista can be recognized because it has no nose cup or communication diaphragms. The Scott AV-2000 and AV-2000 Comfo-Fit can be recognized because it has a nose cup and communication diaphragms. Comfo–Fit face pieces are different from regular AV-2000 face pieces in that they have no size specified. The nose cup cannot be removed from the AV-2000 face piece. Scott face pieces are also available in several strap/harness configurations. The model, size, and strap/harness configuration all affect the fit of Scott face pieces. Each user is fit for the model, size, and strap/harness configuration that provides the best fit and applicability to their work. For Scott face pieces, the model, size, and strap/harness configuration for which a user is fit are specified on their mask fit card.

ATTACHMENT A – RESPIRATOR USER AND ISSUER BRIEFING (cont.)

Respirator Use

Respirators shall be used for a maximum duration of one shift. Radiological release procedures apply to respirators used strictly for protection in air monitoring zones. New respirator cartridges must be obtained when cartridges cannot be radiologically released. New respirators may have to be obtained if radiological release cannot be obtained, especially on back shifts.

Control of Respirators

Respirators (includes APR/PAPR masks and hoods, PAPR blowers, and respirator cartridges and canisters) shall be properly controlled from the time issued until the time returned to the issue station. Respirator users are responsible for proper control of respirators issued to them. When not in use, respirator users shall control respirators issued to them by:

- Keeping their respirators in their possession.

  Respirators not in use should be in the physical possession of the user. This includes being carried by the user or sitting in plain sight of the user (e.g., on the seat of a vehicle next to them).

- Storing their respirators in a secure location:

  – Outside areas where respiratory protection is required
  – Outside of radiological buffer areas
  – In a place where the respirator is protected from tampering, physical damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals.